



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8

999 18<sup>TH</sup> STREET - SUITE 500  
DENVER, CO 80202-2466

DEC 18 1998

RECEIVED

DEC 17 1998

D.E.Q.

Ref: 8EPR-EP

Van Jamison, Division Administrator  
Planning, Prevention and Assistance Division  
Montana Department of Environmental Quality  
1520 East Sixth Avenue  
P.O. Box 200901  
Helena, Montana 59620-0901

Re: TMDL Approvals  
*Elk Creek*

Dear Mr. Jamison:

We have completed our review of the total maximum daily loads (TMDLs) as submitted by your office for the waterbodies listed on the attachment to this letter. In accordance with the Clean Water Act (33 U.S.C. 1251 et. seq.), we approve all aspects of the TMDLs as developed for water quality limited waterbodies as described in Section 303(d)(1). We acknowledge that this particular TMDL for Elk Creek is based on primarily on a voluntary and incentive-based approach to implementation.

Based on our review, we feel the separate elements of the TMDLs listed in the attached table adequately address the pollutants of concern as given in the table, taking into consideration seasonal variation and a margin of safety.

Thank you for your submittal. If you have any questions concerning this approval, feel free to contact Bruce Zander of my staff at 303/312-6846.

Sincerely,

*Paul L. Campbell for*

Max H. Dodson  
Assistant Regional Administrator  
Office of Ecosystems Protection and  
Remediation

Enclosures

cc: John Wardell, MOO



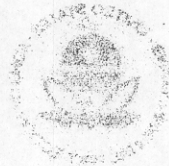
Printed on Recycled Paper

Enclosure

APPROVED TMDLS

Waterbody Name*	TMDL Parameter/ Pollutant	Water Quality Goal/Endpoint	TMDL	Section 303(d)1 or Section 303(d)3 TMDL	Supporting Documentation
Elk Creek* (HUC 17010213 MT76N0036)	sediment	restoration of native trout	50% reduction in annual sediment load at the mouth of Elk Creek	§303(d)(1)	Green Mountain Watershed Project Implementation Plan (February 1997)  Elk Creek Watershed Council letter and maps to R. Lincoln (MDEQ) from M. Miller (ECWC) (July 3, 1998)  "Elk Creek Near Heron: WC Level 2.5 Stream Survey; Reach Health Assessment Management and Rehabilitation Recommendations" (June 12, 1997)

\* An asterisk indicates the waterbody has been included on the State's Section 303(d) list of waterbodies in need of TMDLs.



■ TMDL Checklist ■  
EPA Region VIII

State/Tribe: Montana  
Waterbody Name: Elk Creek

Point Source-control TMDL: Nonpoint Source-control TMDL: X (check one or both)

Date Received: May 11, 1998 and July 17, 1998 Date Review completed: September 4, 1998

Review Criteria (All criteria must be met for approval.)	Approved (check if yes)	Comments
■ TMDLs result in maintaining and attaining water quality standards	X	Control practices were developed to meet the use classification of Cold Water Fishery - Trout for Elk Creek. The target for restoration includes habitat improvements and application of sediment control practices to restore the designated use of the waterbody.
■ TMDLs have a quantified target or endpoint	X	There are no numeric criteria directly available for sediment. Rather, the indicator used for the TMDL endpoint is a straight measure of the fishery population. Metrics include trend data for species composition, age class, and numbers.
■ TMDLs include a quantified pollutant reduction target, but this target can be expressed in any appropriate manner	X	The TMDL for sediment (the pollutant of concern) is a reduction in annual sediment loading by 50% at the mouth of Elk Creek.
■ TMDLs must consider all significant sources of the stressor of concern	X	Significant sources include sediment from erosive stream banks and unstable stream channels. Control practices address specific in-channel and bank/riparian conditions that result in accelerated erosion and excessive sediment delivery.
■ TMDLs are supported by an appropriate level of technical analysis	X	Analysis is made using Rosgen-type approach to stream assessment. This is an appropriate level of technical analysis for these pollutants and for the discharge type.
■ TMDLs must contain a margin of safety and consider seasonality	X	An appropriate margin of safety is included by thorough identification of sources and detailed segment-by-segment analysis of stream and bank conditions. Seasonality was adequately considered by 1) evaluating a biological baseline during appropriate seasons and 2) evaluating the cumulative sediment loading over all seasons.
■ TMDLs apportion loads or responsibility for taking actions	X	The water quality endpoint and TMDL can be achieved with controls only on nonpoint sources. Allocation of the TMDL % reduction is made back to specific locations in the stream (focusing on locations in the East Fork and mainstem of Elk Creek.) See maps included in documentation for a detailed accounting of where each control practice will be implemented.
■ TMDLs involve some level of public involvement or review	X	The Elk Creek Watershed Council has sponsored stakeholder meetings as well as educational efforts within the watershed. The number of cooperating organizations and roles are included in the TMDL documentation.

See EPA Region VIII's Elk Creek TMDL Review (November 13, 1998) for further details regarding the various elements of this TMDL.

## Elk Creek TMDL Review

US EPA; Region VIII

November 13, 1998

### Waterbody

Elk Creek (MT76N0036; USGS HUC 17010213)

This waterbody is included on Montana's 1998 Clean Water Act Section 303(d) list of waters in need of TMDLs

### Pollutant of Concern

Sediment and other habitat factors

### Date Submitted to EPA

May 11, 1998 with additional information on July 15, 1998

### Date Review Completed

September 4, 1998

### Supporting Information

Elk Creek Watershed Council (1998); correspondence from Mike Miller, Chair, Elk Creek Watershed Council to Roxann Lincoln, Montana DEQ (July 3, 1998)

Green Mountain Watershed Project Implementation Plan (1997);

Montana DEQ (1998a); correspondence from Van Jamison, Montana DEQ, to Max Dodson, US EPA (May 11, 1998)

Montana DEQ (1998b); correspondence from Roxann Lincoln, Montana DEQ, to Bruce Zander, US EPA (July 15, 1998)

Rosgen, Dave; Applied River Morphology, Wildlife Hydrology (1996)

Watershed Consulting; Report prepared for the Elk Creek Watershed Council: "Elk Creek Near Heron: WC Level 2.5 Stream Survey; Reach Health Assessment Management and Rehabilitation Recommendations" (June 12, 1997)

US EPA (1997); correspondence from Geoffrey H. Grubbs, Director, Assessment and Watershed Protection Division to FACA Workgroup on Section 303(d) listing Criteria (May 23, 1997)